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FUNCTIONS OF BATTALION COMMAND GROUPS

by

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November 1975

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operations (attack, defense, delay, and road movement) were identified; and the tasks and activities related to each function specified. The four combat operations were analyzed to determine commonality and differences, and then to determine criticality of functions, combat-experienced officers rated each function for all four operations on an Importance Scale.

Sixteen functions, 75 tasks, and 192 activities were identified. All functions were found to be common to all four operations. Among the subfunctions, 73 tasks and 118 activities were found to be common.

The six-step explanatory model of command group performance, and a listing of all tasks and activities, classified according to functions associated with them, are presented in the report. ←

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SUMMARY

PROBLEM

Traditional methods for training and evaluating battalion command and staff personnel in the performance of command and control functions have become increasingly less feasible because of constraint upon resources such as personnel, equipment, terrain, and funds. Accordingly, there is a need for inexpensive, innovative methods for effectively training and evaluating battalion command groups in the performance of functions required for effective combat operations.

Several agencies within the Army are currently engaged in development of materials and methods to be used in training and evaluating command groups. However, to be maximally effective, such development should be based upon a sound foundation of knowledge about the functions served by command groups and the activities associated with these functions. To date such information has not been documented in any systematic and verified form.

Because of the need described above, HumRRO was requested to conduct research concerned with the functions of battalion command groups. Specifically the research problem was to: (1) analyze the functions served by battalion command groups in the execution of combat operations, (2) identify those functions which are most critical to effective combat performance, and (3) specify command group actions associated with effective performance of the functions.

METHOD

The approach was to:

- (1) Develop a model of command group functioning in combat operations.
- (2) Analyze previous findings concerning command group functioning and review relevant military publications in order to specify functions served by command groups in the following types of operations: attack, defense, delay, and road movement.

(3) Derive tasks related to performance of each function and identify the activities associated with performance of the tasks and functions.

(4) Verify the validity of the functions, tasks, and activities through a series of reviews by committees of officers who were combat experienced and doctrinal experts representing The Combat Arms Training Board, The U.S. Army Command and General Staff College, The U.S. Army Infantry School, and The U.S. Army Armor School.

(5) Analyze the four types of combat operations to determine the extent of commonality and differences with respect to the functions, tasks, and activities.

(6) Determine the relative criticality of identified functions by obtaining ratings by combat-experienced officers of the importance of the functions.

RESULTS

A six-step explanatory model of command group performance was developed and is presented in the report. The model describes the functioning of a command group in combat operations and provides a basis for analysis of performance in training simulations.

Sixteen functions of battalion command groups were identified. The functions are: (1) collect information and intelligence, (2) process information and intelligence, (3) analyze information and intelligence, (4) employ intelligence in making decisions, (5) disseminate information and intelligence, (6) stay abreast of current situation, (7) develop scheme of maneuver for operation, (8) supervise execution of scheme of maneuver, (9) develop plan of fire support, (10) supervise delivery of prearranged fire support, (11) supervise/request delivery of unplanned fire support, (12) direct counterintelligence activities, (13) issue orders, (14) supervise execution of orders, (15) maintain communications capability, and (16) maintain communications flow. The analysis showed that all functions are common to the four types of combat operations: attack, defense, delay, and road movement.

Most functions were judged by combat-experienced officers to have considerable importance and none were rated lower than 6.5 on a 10-point scale

of importance. For the various functions, differences in criticality were found for the four combat operations.

Totals of 75 tasks and 192 activities were identified. Among the tasks, 73 are common to the four types of operations and 118 activities are common. Thus, more than one-half of the activities are common; but, for each type of operation, certain ones are specific and do not overlap. All tasks and activities, classified according to functions associated with them, are presented in the report.

IMPLICATIONS

The principal products of this project are the verified functions of battalion command groups and the tasks and activities associated with effective performance of the functions. Since the results are the end product of extensive analysis by the HumRRO research staff and repeated verification and revision by several groups of officers who are both combat experienced and doctrinal experts, strong confidence can be placed in the validity of the findings.

The identified functions and their associated activities constitute a sound foundation upon which training and evaluation systems can be developed. Use of them as bases for such development can insure that training systems provide experience in performance areas that are most critical for combat performance and that command groups in training are evaluated according to criteria that are most relevant to effectiveness.

PREFACE

This report describes work performed by the Human Resources Research Organization (HumRRO) for a project with the overall objective of determining the functions served by U.S. Army battalion command groups in the execution phase of combat operations. The project was conducted by HumRRO for the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI).

Work on the project was begun in July 1975 and completed in November 1975 and was conducted by the staff of the Columbus, Georgia, Research Office of HumRRO's Central Division. Dr. Joseph A. Olmstead is Director of the Columbus Office and served as Project Director. The research staff consisted of LTC (Retired) Fred K. Cleary, Mr. James A. Salter, and Mr. Theodore R. Powers.

Dr. Robert T. Root served as ARI technical monitor of the project. Lieutenant Colonel James L. Madden and Major Wade C. Smith of the U.S. Army Combat Arms Training Board (CATB), Fort Benning, Georgia, made substantial contributions to the inception, concepts, models, and results of the project. Major Smith served as CATB Project Officer.

The work was performed under Contract No. DAHC 19-76-C-0005, A Study of Functions Performed by Battalion Command and Control Teams.

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FUNCTIONS OF BATTALION COMMAND GROUPS

INTRODUCTION

This report presents the results of a project whose purpose was to provide data and information which can serve as the foundation for development of training and evaluation systems for use with U.S. Army battalion command groups. The specific objective was to identify the functions, and associated activities, served by battalion command groups during the execution phase of combat operations.

MILITARY PROBLEM

Traditional methods for training and evaluating battalion command and staff personnel in the performance of command and control activities have become increasingly less feasible because of constraints upon resources such as personnel, equipment, terrain, and funds. Accordingly, there is a need for inexpensive, innovative methods for effectively training and evaluating battalion command groups in the performance of functions required for effective combat operations.

Several agencies within the Army are currently engaged in development of materials and methods to be used in training and evaluating command groups. However, to be maximally effective, such development should be based upon an accurate foundation of knowledge about the functions performed by command groups and the activities associated with these functions. To date, such functions and activities have not been documented in any systematic and verified form.

If the information were available, it could serve as the foundation for development of training objectives, specification of required knowledges and skills, design of training scenarios, and development of systems for evaluating and conducting critiques of command group performance.

RESEARCH PROBLEM

Because of the need described above, the Human Resources Research Organization (HumRRO) was requested to conduct research concerned with the functions of battalion command groups. More specifically the research problem was to:

- (1) Determine the functions served by battalion command groups in the execution of combat operations.
- (2) Identify those functions which are most critical to effective combat performance.
- (3) Specify command group actions associated with effective performance of the critical functions.

BACKGROUND

The U.S. Army Combat Arms Training Board (CATB) has as its mission the improvement of training within the combat arms of the Army. A current concern of CATB is the development of improved systems for training and evaluating the performance of battalion command groups. One possible solution being investigated is to make possible the training and evaluation of command groups through provision to field units of combat simulations and associated training and evaluation procedures which are systematically designed to (1) challenge commanders and staffs in critical functional areas, (2) achieve specific training objectives, and (3) permit evaluation and critique of group performance in the critical areas. The systems are to be capable of use at field-unit levels and susceptible to administration by either brigade- or battalion-level personnel. Accordingly, the simulated combat environments must be systematically designed to accomplish desired objectives and both the training and evaluation procedures must be clearly delineated and carefully specified as to means of accomplishment.

A significant feature of the planned training and evaluation systems is emphasis upon the functioning of battalion command groups as teams. That is, the training will be devoted to improving capabilities of such groups to function as integrated units and, similarly, evaluation will be conducted on the bases of group products, as opposed to training and evaluation of individual group members in the performance of their separate roles.

The purpose of the planned training systems is to provide field units with effective opportunities for learning to conduct tactical operations under the rapidly-changing conditions of modern combat environments. Effective performance under these conditions requires that a command group be proficient in (1) accurate assessment of rapidly and constantly fluctuating battlefield situations and (2) making effective decisions and communicating

instructions concerning their implementation, frequently under the pressure of very short time constraints.

Training intended to develop effective performance must be systematically designed to provide (1) frequent opportunities for practice in assessing combat situations and in making and communicating decisions about them, (2) opportunities to observe the impact of decisions and actions upon the course of ongoing tactical operations, and (3) information about the ultimate effectiveness of actions and of ways they might have been better accomplished. Such training can be most effectively designed only if the critical functions served by command groups are known. When the functions, and the activities associated with them, can be identified, it will be possible to develop scenarios that are specifically designed to probe the activities of command groups in critical functional areas, thus insuring that the training will provide the required assessment and action experiences.

In a similar vein, knowledge of critical functions and of activities associated with them is essential for development of effective evaluation and critique systems. Although mission accomplishment must be the ultimate criterion of effective performance, mere knowledge of success or failure in accomplishing a mission during a training exercise is not sufficient for maximum learning to be achieved. In addition, team members need knowledge about the quality of their performance of the various functions and activities that contributed to their ultimate performance of the mission. Therefore, it is important to develop evaluation and critique systems that will permit identification and assessment of specific functions and activities performed during the training simulations.

The study reported here was designed to provide the needed information concerning the functions and activities performed by battalion command groups in combat operations. The results constitute basic data for use in the development of training simulations and evaluation systems.

METHOD

The approach used was to (1) develop a model of command group functioning in combat operations, (2) specify functions served by command groups in four types of combat operations, (3) derive tasks related to performance of each function and identify the activities associated with performance of the tasks and functions, (4) analyze four types of combat operations to determine the extent of commonality and differences with respect to performance of the functions, tasks, and activities, and (5) determine the relative criticality of identified functions.

INITIAL GUIDANCE

In an initial meeting between HumRRO personnel, the CATB Project Officer, and a representative of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), the following points for guidance of the project were agreed upon:

- (1) The functions to be derived were to be those of a command group of a Mechanized Infantry Battalion operating as an "infantry-heavy" task force.
- (2) The command group was to consist of the following positions:
 - (a) Battalion Commander.
 - (b) Intelligence Officer (S2).
 - (c) Operations and Training Officer (S3).
 - (d) Assistant Operations and Training Officer (Air)
(Assistant S3-Air).
 - (e) Fire Support Coordinator (FSCoord).
 - (f) Air Liaison Officer (ALO)
- (3) Functions and activities should be specified for the following types of operations:
 - (a) Attack.
 - (b) Defense.
 - (c) Delay.
 - (d) Road Movement.

(4) The functions were to be "group functions," i.e., a function performed by any member of a command group should be considered as a function of the group as a whole.

(5) To the extent feasible, focus should be upon outputs of the command group rather than its internal processes.

(6) Because they are to be used to develop an evaluation system, activities should, insofar as possible, be stated in terms of observables or descriptions from which observable products can be inferred for later development of criterion activities.

(7) Activities should be described at a level of specificity such that a logical next step will be the derivation of criterion activities specific to particular simulation scenarios.

(8) All functions, tasks, and activities should be based upon current, rather than anticipated future, doctrine.

DEVELOPMENT OF MODEL

The first step was to develop a model which would describe the functioning of a command group in the execution of combat operations. Findings from earlier HumRRO projects concerned with battalion command group operations^{1,2,3} and field observations of Army Training and Evaluation Programs (ARTEPs) and Operational Readiness Tests (ORTs) were reviewed. Performance of battalion command groups in the Combined Arms Tactical Training Simulator (CATTS) were also observed. Then, in coordination with CATB personnel, an explanatory model was developed. The model was used to categorize and sequence the later-identified functions and to demonstrate the relationships of the functions to ultimate outcomes of command group efforts.

¹Powers, Theodore R. and DeLuca, Arthur J. *Knowledge, Skills, and Thought Processing of the Battalion Commander and Principal Staff Officers*, HumRRO Technical Report 72-20, July 1972.

²Tremble, Trueman R., DeLuca, Arthur J., and Lackey, Larry L. *Decision-Making and Training Techniques for Command and Control Systems*, HumRRO Final Report FR-CD(C)-75-3, June 1975.

³Olmstead, Joseph A., Christensen, Harold E., and Lackey, L. L. *Components of Organizational Competence: Test of a Conceptual Framework*, HumRRO Technical Report 73-19, August 1973.

IDENTIFICATION OF FUNCTIONS

For this project, "function" was defined as "a collection of tasks performed by a command group, which serve a common purpose and the accomplishment of which is critical to success of the battalion mission." To analyze functioning of a command group, results of HumRRO's earlier work,^{1,2,3} HumRRO's ongoing work in support of CATTS, and a large number of military publications pertaining to battalion operations were reviewed.

For development of a candidate set of functions, the attack was selected as the initial operation to be analyzed. From the above-described findings and literature, a tentative list of candidate functions was derived. These functions were reviewed and analyzed within the context of an attack conducted by a Mechanized Infantry Battalion operating as a Battalion Combined Arms Task Force. The result was a list of functions for the attack which was submitted to CATB for review, verification, and comment.

After review and comment by CATB and completion of indicated revisions of functions for the attack, similar analyses were performed for defense, delay, and road movement. Throughout, coordination on questions of doctrine or practice was maintained with appropriate departments of The U.S. Army Infantry School. Finally, the four sets of functions were compared to determine commonalities and differences.

SPECIFICATION OF TASKS AND ACTIVITIES

For this project, "task" was defined as "one or more activities that are performed together to achieve a specific goal or product." On the other hand, "activity" was defined as "one of the required actions taken by a command group which contributes to the accomplishment of a task."

¹Powers, Theodore R. and DeLuca, Arthur J. *Knowledge, Skills, and Thought Processing of the Battalion Commander and Principal Staff Officers*, HumRRO Technical Report 72-20, July 1972.

²Tremble, Trueman R., DeLuca, Arthur J., and Lackey, Larry L. *Decision-Making and Training Techniques for Command and Control Systems*, HumRRO Final Report FR-CD(C)-75-3, June 1975.

³Olmstead, Joseph A., Christensen, Harold E., and Lackey, L. L. *Components of Organizational Competence: Test of a Conceptual Framework*, HumRRO Technical Report 73-19, August 1973.

Command group functions were analyzed within the separate context of each of the respective types of operations. For each function within each type of operation, tasks necessary to perform that function were identified. Then, activities that contribute to tasks were derived.

It is important to note that all tasks and activities that might be required were specified, not just those which are always essential. Thus, some of the tasks and activities shown in the RESULTS Section of this report are mutually exclusive. Furthermore, all are not universally applicable for all circumstances. The objective was to develop a list of all tasks and activities related to the critical functions, from which list it would then be possible to select those tasks and activities applicable to a particular scenario.

Finally, listings for the various operations were compared to determine differences and commonalities.

REVIEW AND VERIFICATION

After development and internal HumRRO review of the complete sets of functions, tasks, and activities for attack, defense, delay, and road movement, the draft documents were submitted to the following sequence of reviews:

- (1) A committee of combat-experienced CATB officers, certain members of which were representative of each of the combat arms.
- (2) A committee of officers representing relevant departments and committees of The U.S. Army Infantry School.
- (3) Representatives of The U.S. Army Command and General Staff College.
- (4) Representatives of The U.S. Army Armor School.

For each of the above groups, the draft documents were reviewed by members individually. After individual review, HumRRO and CATB project personnel met, in separate sessions, with the full committees of CATB and The Infantry School and representatives of The Command and General Staff College and The Armor School to receive and discuss comments and recommended modifications.

Draft documents were then revised and a new draft version was submitted to the CATB Project Officer for final review.

DETERMINATION OF CRITICALITY

It was desired to obtain an estimate of the relative criticality of the various functions for effective accomplishment of the four types of operations. Accordingly, 23 combat-experienced officers were requested to rate each function on an Importance Scale for each operation separately. The criticality rating instrument is shown in Appendix A. Respondents rated functions on a 10-point scale ranging from "Of Little Importance" to "Of Critical Importance." Midpoint of the scale was labeled "Moderately Important."

Means and standard deviations of the ratings were computed for each function and the functions were ranked according to mean criticality rating within each type of operation.

RESULTS

A MODEL OF COMMAND GROUP PERFORMANCE

Figure 1 shows the explanatory model of command group performance. In Figure 1, each numbered block represents one of the following steps in the sequence of performance:

- Step 1 - At the beginning of an operation, a command group is provided a given amount of resources (personnel, units, equipment, etc.), a mission, and has available information concerning the general situation.
- Step 2 - The command group collects, records, analyzes, displays, and passes on information and intelligence.
- Step 3 - At all times, the group must know the current situation and current status of resources.
- Step 4 - Based upon its analyses of information, intelligence, the current situation, and current status of resources, the command group makes plans and decisions concerning the conduct of the battalion's operations.
- Step 5 - The command group communicates its plans, decisions, implementing orders, and intelligence to individuals and units as it deems appropriate.
- Step 6 - If the above activities are performed effectively, the mission will be accomplished within a minimum time consistent with an acceptable ratio of friendly to enemy casualties and weapons systems losses.

Steps 1 and 6 are one-time events. Of course, Step 1 occurs only at the beginning of an operation and Step 6 is the final result. On the other hand, Steps 2, 3, 4, and 5 constitute a cycle of events which repeats itself many times as situations, missions, and resources change during the course of an operation. Accordingly, Step 6, the ultimate outcome, will be influenced, not only by single significant events, but by consistent proficiency in the many repeated performances of the cycle.

All earlier steps determine Step 6. The general situation, the nature of the assigned mission, and the amount and types of resources allocated to

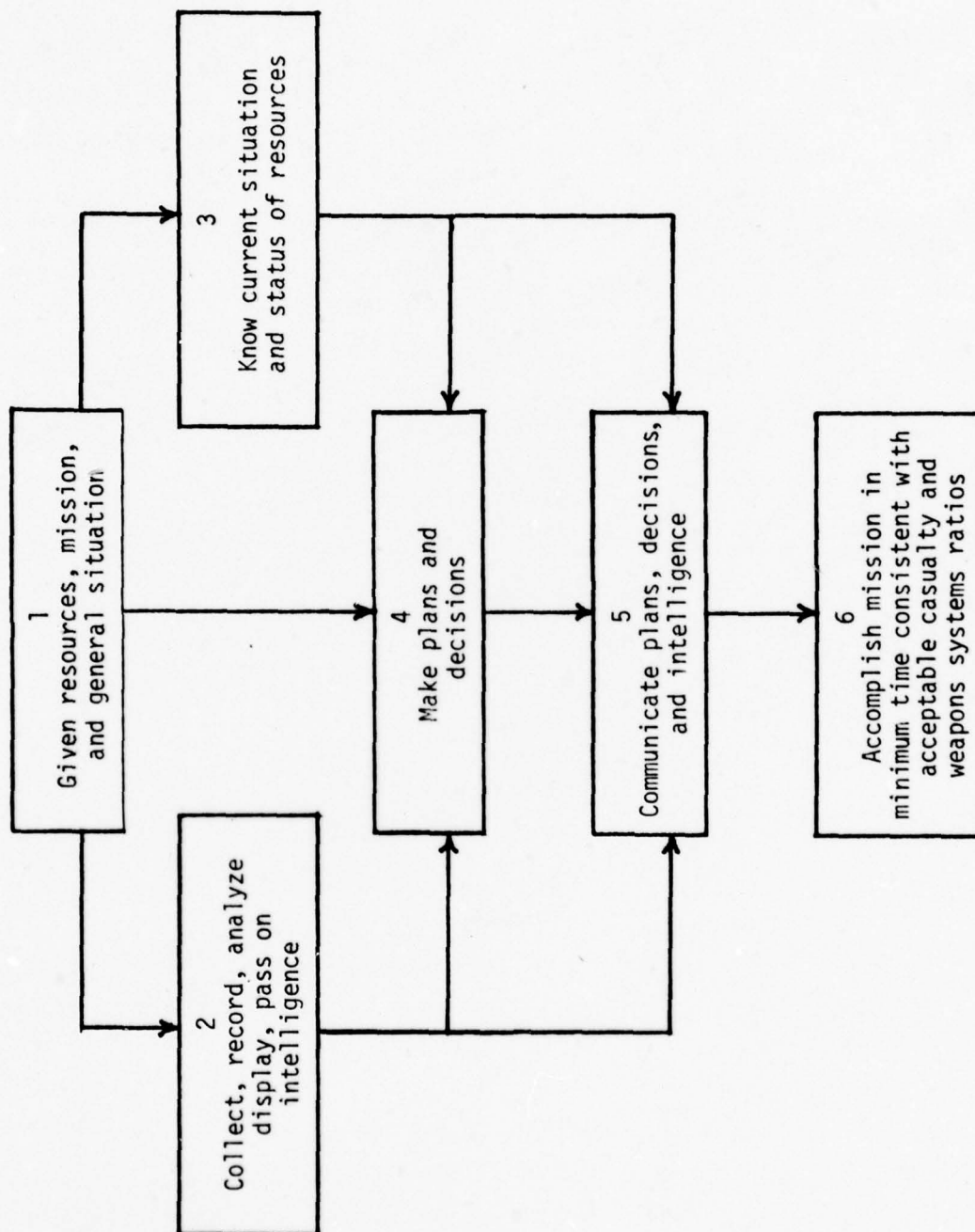


Figure 1. Explanatory Model, Command Group Performance

the battalion at the beginning of an operation (Step 1) play an important role in the ultimate outcome. However, of equal importance are the caliber of the functions and activities performed during Steps 2, 3, 4, and 5. Assuming that the general situation is not overwhelming, the mission is proper within the context of the general situation, and the assigned resources are adequate, the quality of the functions and activities performed in Steps 2, 3, 4, and 5 will be the major determinants of overall effectiveness.

The model provides a convenient way of classifying and sequencing the functions performed by command groups. Furthermore, it provides a meaningful way of relating the functions to ultimate outcomes.

FUNCTIONS OF BATTALION COMMAND GROUPS

The analysis resulted in identification of 16 basic functions performed by battalion command groups during combat operations. Following are the functions categorized according to the steps of the model within which they were found to occur:

Model Step 2 - Collect, Record, Analyze, Display, Pass On Intelligence.

1. Collect information and intelligence (Intelligence).
2. Process information and intelligence (Intelligence).
3. Analyze information and intelligence (Intelligence).
4. Employ intelligence in making decisions (Intelligence).
5. Disseminate information and intelligence (Intelligence).

Model Step 3 - Know Current Situation and Current Status of Resources.

6. Stay abreast of current situation (Command, Control, and Communications).

Model Step 4 - Make Plans and Decisions.

7. Develop scheme of maneuver for operations (Mobility).
8. Supervise execution of scheme of maneuver (Mobility).
9. Develop plan of fire support (Firepower).
10. Supervise delivery of prearranged fire support (Firepower).
11. Supervise/request delivery of unplanned fire support (Firepower).
12. Direct counterintelligence activities (Intelligence).
13. Issue orders (Command, Control, and Communications).
14. Supervise execution of orders (Command, Control, and Communications).

Model Step 5 - Communicate Plans, Decisions, and Intelligence.

15. Maintain communications capability (Command, Control, and Communications).
16. Maintain communications flow (Command, Control, and Communications).

The functions are defined by the tasks and activities of which they are comprised (see Appendix B). Terms in parentheses indicate that function of land combat within which each command group function is classified.

Commonality of Functions

The analysis showed that all of the above functions are required for each of the four types of operations considered in this study: attack, defense, delay, and road movement. Thus, the functions are common to the four types of operations and, in all probability, to all types of combat operations.

Criticality of Functions

Table 1 shows means and standard deviations of criticality ratings for 14 of the 16 functions. Two functions--"Analyze information and intelligence" and "Direct counterintelligence activities"--were identified by the verification committees and added to the list of functions after the criticality rating instrument had been distributed to the sample of officers. Accordingly, no ratings were obtained for these functions. Also, a candidate function--"Develop contingency plans"--which appears in the instrument (Appendix A) was deleted by the committees and activities associated with it were revised and included under "Supervise execution of scheme of maneuver." Ratings for the deleted function are not included in Table 1.

From Table 1, it can be seen that most functions were judged to have considerable importance. Some variability between functions was found for all operations. The widest range occurs for Road Movement. The standard deviations vary in size for the different functions, indicating that there is considerable more uniformity of opinion for some functions than for others. In short, for some functions, raters agree as to their importance; for others, agreement is not so great. In general, agreement is greatest for those functions deemed most important. It appears that there are certain functions which are so critical that little disagreement is possible. On the other hand, when a function may not be quite so critical, greater variety of opinion exists.

Table 1
Criticality of Command Group Functions^a

Function	Importance Rating							
	Attack		Defense		Delay		Road Movement	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1. Collect information and intelligence	8.35	2.21	8.30	2.34	8.64	2.06	6.87	2.42
2. Process information and intelligence	8.22	2.19	8.30	1.87	8.50	1.54	6.83	2.37
3. Analyze information and intelligence	-	-	-	-	-	-	-	-
4. Employ intelligence in making decisions	9.56	.66	9.35	.98	9.17	1.30	7.87	2.05
5. Disseminate information and intelligence	8.35	1.43	8.44	1.41	8.57	1.34	7.26	2.01
6. Stay abreast of situation	9.65	.65	9.78	.60	9.64	.66	9.74	.62
7. Develop scheme of maneuver for operation	9.30	1.02	7.91	2.11	9.30	1.06	8.00	2.00
8. Supervise execution of scheme of maneuver	8.35	1.72	7.73	2.21	9.18	1.53	7.36	2.32
9. Develop plan of fire support	9.00	1.45	9.61	.78	9.48	.95	7.74	1.91
10. Supervise delivery of prearranged fire support	7.00	2.09	8.17	2.06	8.48	1.89	6.41	2.26
11. Supervise/request delivery of unplanned fire support	7.83	1.64	8.41	1.50	8.36	1.76	7.50	2.09
12. Direct counterintelligence activities	-	-	-	-	-	-	-	-
13. Issue orders	9.13	1.18	8.83	1.27	9.09	1.27	8.95	1.46
14. Supervise execution of orders	8.39	1.75	8.57	1.62	8.96	1.53	8.64	1.40
15. Maintain communications capability	9.52	.73	9.70	.64	9.55	.96	9.39	1.20
16. Maintain communications flow	8.22	1.98	8.65	2.04	8.41	2.22	7.83	2.48

^aRatings were not obtained for Functions No. 3, "Analyze information and intelligence" and No. 12, "Direct counterintelligence activities."

TASKS AND ACTIVITIES

The tasks and activities associated with each function for the four types of combat operations are shown in Appendix B. It is important to note that some of the activities are mutually exclusive, i.e., if one is performed, another may be precluded. Similarly, a number of the activities may be performed under particular circumstances but not under others. Thus, all of the tasks and activities shown in Appendix B are not essential under all conditions. Rather, the list consists of all tasks and activities that may be associated with the functions of command groups and a given set of circumstances will require selection of those deemed necessary for effective performance. This consideration will be important in the design of training and evaluation systems.

The activity statements were designed at a level of specificity such that they can be readily converted to "criterion activities" applicable to a particular simulation. During the course of the work, it became apparent that effectiveness in the performance of an activity can be accurately evaluated only in relation to the circumstances that precipitate it and the conditions under which it is performed. This means that it will be necessary to design criteria specific to each simulation. Accordingly, the activity statements shown in Appendix B were designed at a level of specificity such that, in one additional step, they can be easily converted to criteria appropriate for particular simulations.

Table 2 shows the numbers of tasks and activities for the four types of operations. From the table, it can be seen that there are no differences between operations in the number of tasks involved and only slight differences with respect to activities. Although the same number of tasks were found for all operations, only 73 are common to all. One task does not apply to Road Movement, and one applies only to that operation.

Among the tasks appearing in Appendix B, 73 (97.3 percent) are common to the four types of operations. One hundred eighteen activities (61.78 percent) are common to all of the operations analyzed. Thus, it appears that most activities are common, but for each operation a few are specific and do not overlap.

Table 2

Tasks and Activities for Four Types of Operations

Operation	Tasks	Activities
Attack	74	145
Defense	74	143
Delay	74	142
Road Movement	74	146

DISCUSSION

The main product of the work described in this report is identification of the functions served by battalion command groups in four types of combat operations--attack, defense, delay, and road movement. Furthermore, the tasks and activities associated with effective performance of the functions have been specified. Since the results are the end product of extensive analysis by the HumRRO research staff and repeated verification and revision by several groups of officers who are both combat experienced and doctrinal experts, strong confidence can be placed in the validity of the findings.

The identified functions and their associated activities constitute a sound foundation upon which training and evaluation systems can be developed. Use of them as bases for such development can insure that training systems provide experience in performance areas that are the most critical for combat proficiency and that command groups in training are evaluated according to criteria that are the most relevant to effectiveness.

USE IN TRAINING DEVELOPMENT

The functions, tasks, and activities are appropriate for use as bases for all types of programs concerned with training of actual or potential battalion command and staff personnel. They specify what the members of a command group are supposed to do in the execution phase of combat operations. Accordingly, they can serve as bases for development of all types of courses of instruction and training exercises devoted to battalion command group functioning.

Use in Scenario Development

For use in the development of training scenarios, the functions of command groups appear to be the most useful product. The most critical aspect of scenario design is to insure that the scenario is constructed so as to present problems that are directly related to the objectives of the training and will challenge a command group across the full spectrum of the functions it will be required to serve in combat. In addition, the problems must be presented with realism and credibility sufficient to evoke genuine responses

from players. Development of training objectives based upon the functions identified in this report will insure that the training is oriented toward goals that are fully relevant to combat requirements. Then if scenarios are designed so as to stimulate players to conduct activities related to the training objectives, i.e., to perform the functions identified in this report, there can be assurance that the experiences of players will be directly relevant to performance required in actual combat operations.

To derive objectives for which training can be designed, it will be necessary to identify those functions for which improved performance is desired. Of course, all may be deemed desirable for inclusion. Each function may be used as the basis for one or more objectives. Frequently, the function statement itself may serve as the task component of the objective; in a few instances, it may be necessary to restate the function somewhat differently, perhaps more specifically. Then, it will be necessary to decide upon general conditions under which the performance should occur. From these statements, a framework for a scenario can be designed so as to probe command groups in all areas represented by the training objectives. Finally, the full scenario can be developed by preparing input messages, controller instructions, etc.

In developing training objectives for so-called "free-play" exercises, there is a danger that objectives which are stated in highly-specific terms may never be accomplished, or at least evaluated effectively, because the necessary behaviors do not always occur exactly as stipulated under the loosely controlled conditions characteristic of free play. Accordingly, objectives for "free-play" exercises should be stated at a moderately general level.

After completion of the scenario, the training objectives can be refined to include conditions and standards specific to the situations depicted in the scenario. Standards may be developed by selecting tasks and actions (Appendix B) that are relevant for the scenario and determining what would constitute effective performance under the particular conditions imposed by the scenario.

Therefore, the most productive approach to design of a scenario appears to be (1) select those functions for which training is desired, (2) develop training objectives based upon the selected functions, (3) design one or more problems that will stimulate players to perform activities pertinent to each objective, (4) sequence the problems in a realistic fashion within

the context of a credible scenario concept, (5) design input messages for each problem such that they are most likely to evoke responses (actions) pertinent to the training objectives, and (6) assemble the messages, to include background information, into a complete scenario. After completion of the scenario, appropriate instructions for controller personnel can be developed.

Thus, the essential purpose of the functions in scenario development is to provide a verified framework around which training situations can be designed with confidence that they will result in player experiences that are relevant to combat performance requirements.

The criticality ratings for the various functions provide some indication of priorities or weights that might be assigned in instances where circumstances would not permit equal emphasis within a scenario upon all functions. However, in interpreting the criticality ratings, two points should be kept in mind. First, the ratings are based upon a small sample of officers and, accordingly, reliability of the results is somewhat questionable. The mean ratings shown in Table 1 can be taken as a rough indication of the relative criticality of the several functions; but cannot be used for decision purposes with complete confidence without confirmation from a larger sample. Second, it should be recognized that, for the most part, all functions were rated as of from moderate to critical importance. This indicates that all functions are of considerable importance and none should be ignored in the design of scenarios.

To accomplish training according to objectives that are developed as described above, a CPX, or other type of exercise, would be designed to follow the scenario. Under such conditions, learning can occur in two ways. First, players learn from observation of the consequences of their activities during actual play of the problems. Second, even more effective learning occurs when the exercise is coupled with an evaluation system whose elements are related to the training objectives and the results of the evaluation are reported to the players in the form of critiques organized around the training objectives. When players are provided data concerning the quality of their performance on tasks associated with the objectives, learning is more systematic and more lasting than that achieved through experience within the exercise alone.

USE IN EVALUATION SYSTEMS

For the development of evaluation systems, it would appear that the tasks and activities are the most useful products. After systematic development of a scenario based upon the identified functions, it will be possible to specify the activities that should be associated with each function within the context of the particular scenario. The activities can then be converted to "criterion activities" with specific criteria to be used in evaluation. These will provide a detailed list of activities, together with appropriate standards, to be used by evaluators during the observance of CPX performance.

Data concerning all relevant activities associated with a function can be brought together to produce an overall evaluation of performance on the function throughout the exercise. In turn, data concerning the various functions can be related to overall criteria of mission accomplishment. Thus, where the ultimate criterion is mission accomplishment within minimum time consistent with acceptable ratios of friendly to enemy casualties and weapon system losses, data about performance on the various functions will reveal how such performance contributed to the level of accomplishment achieved by a command group on the overall criterion. Then, critiques can be conducted to demonstrate the relationships and identify inadequacies.

An Evaluation Model

In addition to the detailed technical criteria made possible by the activity list, it will also be possible to evaluate the command and control processes used by a command group in execution of the various functions. This can best be understood by a model which demonstrates how processes of command and control¹ are applied to certain functional areas which are modifications of the functions of land warfare. Following is the model:

¹Olmstead, Joseph A., Christensen, Harold E., and Lackey, L. L. *Components of Organizational Competence: Test of a Conceptual Framework*, HumRRO Technical Report 73-19, August 1973.

Functional Area	Command and Control Process				
	Acquire (Receive) Information	Plan and Decide	Direct (Issue Orders)	Supervise Execution	Communicate
Intelligence					
Maneuver					
Fire Support					
Combat Support					
Combat Service Support					

It should be noted that the command and control processes can be subsumed under Steps 2, 3, 4, and 5 of the explanatory model presented in the RESULTS Section.

It can be seen that for each functional area, a command group must perform each of the command and control processes in order to be fully effective. For any functional area, the various processes may be weighted differently; however, all must be performed in some degree if effectiveness is to be achieved.

For evaluation purposes, the problems (probes) and input messages that comprise a scenario should be categorized according to functional area. Functions within each functional area are:

Intelligence:

- Collect information and intelligence.
- Process information and intelligence.
- Analyze information and intelligence.
- Employ information and intelligence.
- Disseminate information and intelligence.
- Direct counterintelligence activities.

Maneuver:

- Develop scheme of maneuver for operations.
- Supervise execution of scheme of maneuver.

Fire Support:

- Develop plan of fire support.
- Supervise delivery of prearranged fire support.
- Supervise/request delivery of unplanned fire support.

Functions pertinent to Combat Support and Combat Service Support were not identified for this project; however, they might easily be included in scenarios if deemed desirable.

Under the evaluation model described above, five of the functions identified for this report may properly be classified as command and control processes. These are:

- (1) Stay abreast of current situation.
- (2) Issue orders.
- (3) Supervise execution of orders.
- (4) Maintain communications capability.
- (5) Maintain communications flow.

After categorization by functional areas, it will be possible to devise criterion questions to be used by evaluators while observing performance in a CPX. Here, the issue is concerned with the quality of performance rather than the presence or absence of it. The general question to be asked is, "For each functional area, how well did the command group perform each of the command and control processes?" To answer the question, it would be necessary to establish general criteria for each process. For example, general criteria for "Communicate" might include completeness, accuracy, and relevance of communications and choice of proper recipients. From such general criteria, it would then be possible to develop more specific ones that could be provided evaluators for use in making observations.

Use of both specific technical criteria connected with the command group activities identified for this project and criteria related to the command and control processes set out in the evaluation model make possible a comprehensive system for evaluating command group performance. Furthermore, data obtained through such evaluation will form a sound basis for the development of constructive critiques of performance.

APPENDIX A

CRITICALITY RATING INSTRUMENT

Your assistance is requested in helping to determine the importance of a number of battalion command group functions to the effective accomplishment of four different types of combat operations: attack, defense, delay, and road movement.

Each of the attached sheets covers one type of operation which is designated at the top of the page. For each of the listed functions, please enter a number in the column headed "Importance Rating." The number you enter should indicate your belief concerning the extent of importance of the function for successful accomplishment of the operation designated at the top of the page. Use the scale shown at the top of each page to select the appropriate ratings. You may select any number between 1 and 10.

You should rate each function independent of all others. Therefore, it may be entirely possible that all functions will receive the same ratings for an operation. On the other hand, you may feel that some are more important than others. Please rate each function according to your best judgment of its importance to successful accomplishment of the operation.

To further assist you, consider that the operations are to be performed by a Heavy Mechanized Infantry Battalion. Furthermore, it is recognized that "road movement" might be subsumed under certain of the other three types of operations. However, for the purposes of this study, please evaluate road movement separately from other types.

Your assistance in this study is appreciated.

TYPE OF OPERATION: ATTACK

Scale of Importance:

Of Little
Importance

Moderately
Important

Of Critical
Importance

1 2 3 4 5 6 7 8 9 10

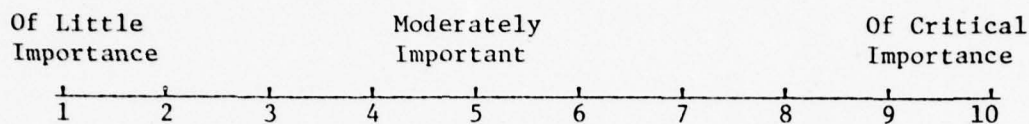
Command Group Function

Importance
Rating

- | | |
|---|-------|
| 1. Collect information and intelligence. | _____ |
| 2. Process information and intelligence. | _____ |
| 3. Employ intelligence in making decisions. | _____ |
| 4. Disseminate information and intelligence. | _____ |
| 5. Develop scheme of maneuver for operation. | _____ |
| 6. Develop contingency plans. | _____ |
| 7. Supervise execution of scheme of maneuver. | _____ |
| 8. Develop plan of fire support. | _____ |
| 9. Supervise delivery of prearranged fire support. | _____ |
| 10. Supervise/request delivery of unplanned fire support. | _____ |
| 11. Issue orders. | _____ |
| 12. Supervise execution of orders. | _____ |
| 13. Stay abreast of situation. | _____ |
| 14. Maintain communications capability. | _____ |
| 15. Maintain communications flow. | _____ |

TYPE OF OPERATION: DEFENSE

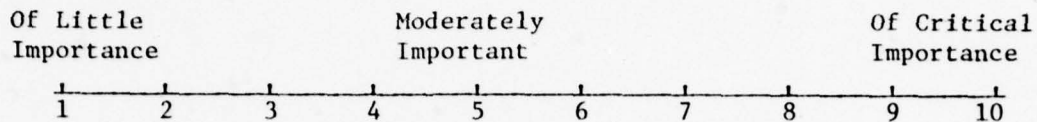
Scale of Importance:



<u>Command Group Function</u>	<u>Importance Rating</u>
1. Collect information and intelligence.	_____
2. Process information and intelligence.	_____
3. Employ intelligence in making decisions.	_____
4. Disseminate information and intelligence.	_____
5. Develop scheme of maneuver for operation.	_____
6. Develop contingency plans.	_____
7. Supervise execution of scheme of maneuver.	_____
8. Develop plan of fire support.	_____
9. Supervise delivery of prearranged fire support.	_____
10. Supervise/request delivery of unplanned fire support.	_____
11. Issue orders.	_____
12. Supervise execution of orders.	_____
13. Stay abreast of situation.	_____
14. Maintain communications capability.	_____
15. Maintain communications flow.	_____

TYPE OF OPERATION: DELAY

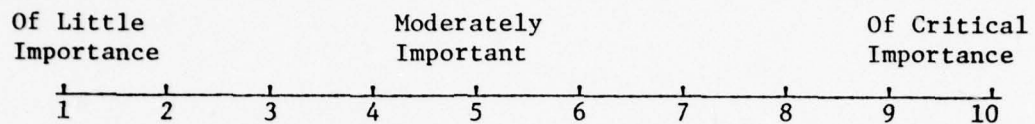
Scale of Importance:



<u>Command Group Function</u>	<u>Importance Rating</u>
1. Collect information and intelligence.	_____
2. Process information and intelligence.	_____
3. Employ intelligence in making decisions.	_____
4. Disseminate information and intelligence.	_____
5. Develop scheme of maneuver for operation.	_____
6. Develop contingency plans.	_____
7. Supervise execution of scheme of maneuver.	_____
8. Develop plan of fire support.	_____
9. Supervise delivery of prearranged fire support.	_____
10. Supervise/request delivery of unplanned fire support.	_____
11. Issue orders.	_____
12. Supervise execution of orders.	_____
13. Stay abreast of situation.	_____
14. Maintain communications capability.	_____
15. Maintain communications flow.	_____

TYPE OF OPERATION: ROAD MOVEMENT

Scale of Importance:



<u>Command Group Function</u>	<u>Importance Rating</u>
1. Collect information and intelligence.	_____
2. Process information and intelligence.	_____
3. Employ intelligence in making decisions.	_____
4. Disseminate information and intelligence.	_____
5. Develop scheme of maneuver for operation.	_____
6. Develop contingency plans.	_____
7. Supervise execution of scheme of maneuver.	_____
8. Develop plan of fire support.	_____
9. Supervise delivery of prearranged fire support.	_____
10. Supervise/request delivery of unplanned fire support.	_____
11. Issue orders.	_____
12. Supervise execution of orders.	_____
13. Stay abreast of situation.	_____
14. Maintain communications capability.	_____
15. Maintain communications flow.	_____

APPENDIX B

FUNCTIONS, TASKS, AND ACTIVITIES OF
BATTALION COMMAND GROUP

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP^a

Function	Task	Activity	Attack	Defense	Delay	Road Movement
<u>Model Step 2. Collect, record, analyze, display, and pass on intelligence.</u>						
1. Collect information and intelligence.	1.1. Extract information and intelligence from brigade warning order.		X	X	X	X
	1.2. Extract information and intelligence from brigade operation order.		X	X	X	X
	1.3. Extract information and intelligence from material received both before and after receipt of brigade warning order.	1.3.1. Extract information from situation map.	X	X	X	X
		1.3.2. Extract information from fire support map.	X	X	X	X
		1.3.3. Extract information from PW reports.	X	X	X	X
		1.3.4. Extract information from air reconnaissance reports.	X	X	X	X
		1.3.5. Extract information from SLAR reports.	X	X	X	X
		1.3.6. Extract information from ASA reports.	X	X	X	X
		1.3.7. Extract information from RED HAZE reports.	X	X	X	X
		1.3.8. Extract information from patrol reports.	X	X	X	X
		1.3.9. Extract information from spot reports from subordinate units.	X	X	X	X
		1.3.10. Extract information from intelligence reports and summaries.	X	X	X	X

(Continued)

^aThe items that appear herein are based upon published doctrine that was current 15 November 1975 and do not take into account contemplated doctrinal changes not yet approved at that time nor any changes that might be indicated by Field Manuals 71-1 and 71-2 which were in draft form at the time this report was prepared.

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
1. Collect information and intelligence. (Cont'd)	1.4. Employ own agencies to obtain information.	1.4.1. Employ Scout Platoon to obtain information.	X	X	X	X
		1.4.2. Employ Ground Surveillance Section to obtain information.	X	X	X	X
		1.4.3. Employ OPs to obtain information.	X	X	X	X
		1.4.4. Employ STANO devices to obtain information.	X	X	X	X
		1.4.5. Employ company-provided patrols to obtain information.	X	X	X	X
		1.4.6. Make personal terrain reconnaissance.	X	X	X	X
	1.5. Request information from subordinate units.	1.5.1. Direct submission of spot reports.	X	X	X	X
		1.5.2. Direct submission of patrol reports.	X	X	X	X
		1.5.3. Direct submission of shelling reports.	X	X	X	X
	1.6. Request information and intelligence from brigade.		X	X	X	X
	1.7. Request information and intelligence from adjacent units.		X	X	X	X
	1.8. Request information from artillery, tactical air, engineers, and other supporting units.		X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
2. Process information and intelligence.	2.1. Record information and intelligence received.		X	X	X	X
	2.2. Graphically display information and intelligence of immediate interest.		X	X	X	X
	2.3. Retain information and intelligence messages, reports, and other material.		X	X	X	X
3. Analyze information and intelligence.	3.1. Evaluate information and intelligence to determine pertinence.		X	X	X	X
	3.2. Interpret information and intelligence to determine meaning and significance.		X	X	X	X
4. Employ intelligence in making decisions.	4.1. See Functions 6 to 16 and included tasks and activities.		X	X	X	X
5. Disseminate information and intelligence.	5.1. Transmit pertinent information and intelligence to higher headquarters.		X	X	X	X
	5.2. Transmit pertinent information and intelligence to adjacent headquarters.		X	X	X	X
	5.3. Transmit pertinent information and intelligence to subordinate units.		X	X	X	X
	5.4. Transmit pertinent information and intelligence to supporting units.		X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
<u>Model Step 3. Know current situation and current status of resources.</u>						
6. Stay abreast of the current situation.	6.1. Maintain current an assessment of enemy situation.	6.1.1. Maintain current an assessment of the strength of enemy forces.	X	X	X	X
		6.1.2. Maintain current an assessment of the disposition of enemy forces.	X	X	X	X
		6.1.3. Maintain current an assessment of enemy resources.	X	X	X	X
		6.1.4. Maintain current an assessment of enemy capabilities.	X	X	X	X
	6.2. Maintain current an assessment of own situation.	6.2.1. Maintain current an assessment of the strength of own forces.	X	X	X	X
		6.2.2. Maintain current an assessment of the disposition of own forces.	X	X	X	X
		6.2.3. Maintain current an assessment of own resources.	X	X	X	X
		6.2.4. Maintain current an assessment of own capabilities.	X	X	X	X
		6.2.5. Request additional resources as needed.	X	X	X	X
<u>Model Step 4. Make plans and decisions.</u>						
7. Develop scheme of maneuver for operation.	7.1. Identify specific and implied missions.	7.1.1. Identify tasks to be performed to accomplish mission(s).	X	X	X	X
		7.1.2. Determine sequence of task performance.	X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
7. Develop scheme of maneuver for operation. (Cont'd)	7.2. Identify possible courses of action.					
	7.3. Specify course of action to be followed.					
		7.3.1. Assign tasks to units.	X	X	X	X
		7.3.2. Assign tasks to be performed in the security area.	X		X	
		7.3.3. Assign tasks to be performed in the forward defense area.		X		
		7.3.4. Assign tasks to be performed in the rear area.		X		
		7.3.5. Assign tasks to be performed enroute.				
		7.3.6. Assign tasks to be performed at designation.				X
		7.3.7. Specify sequence of performance of tasks.				X
	7.4. Establish task organization.	7.4.1. Specify tactical groupings of forces.	X	X	X	X
		7.4.2. Specify command relationships of elements of tactical groupings.	X	X	X	
		7.4.3. Specify names/titles identifying tactical groupings.	X	X	X	
		7.4.4. Assign forces to reconnaissance party, quartering party, and trail party.				X
		7.4.5. Assign remaining forces to march units.				X
		7.4.6. Specify numerical, alphabetical, or other identification of march units.				X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
7. Develop scheme of maneuver for operation. (Cont'd)	7.5. Identify responsibilities of security forces provided by higher headquarters.					
	7.6. Establish own security measures.	7.6.1. Employ covering force and advance, flank, and rear guards.	X	X	X	X
		7.6.2. Employ reconnaissance aircraft for early warning.	X		X	X
		7.6.3. Specify air defense measures to be taken.	X	X	X	X
		7.6.4. Assign sectors of observation during movement and at halts.				X
	7.7. Identify tactical control measures specified by higher headquarters/establish own tactical control measures.	7.7.1. Identify/assign intermediate objectives.	X			
		7.7.2. Identify/designate boundaries.	X	X	X	
		7.7.3. Identify/assign zones of action.	X			
		7.7.4. Identify/assign axis (axes) of advance.	X			
		7.7.5. Identify/assign direction(s) of attack.	X			
		7.7.6. Identify/designate line of departure.	X			
		7.7.7. Designate company attack position.	X			
		7.7.8. Designate company assembly areas.	X			

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP
(Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
7. Develop scheme of maneuver for operation. (Cont'd)	7.7. Identify tactical control measures specified by higher headquarters/establish own tactical control measures. (Cont'd)	7.7.9. Designate company release point (RP).	X			
		7.7.10. Designate probable line of deployment (PLD).	X			
		7.7.11. Designate limit of advance.	X			
		7.7.12. Identify/designate phase lines.	X		X	
		7.7.13. Identify/designate infiltration lanes.	X			
		7.7.14. Identify/designate check points.	X		X	X
		7.7.15. Identify/define the FEBA.		X		
		7.7.16. Identify/establish coordination points.		X	X	
		7.7.17. Designate blocking positions.		X	X	
		7.7.18. Designate assembly areas for reserve forces.	X	X		
		7.7.19. Identify/establish delay lines.			X	
		7.7.20. Identify/designate routes of withdrawal.			X	
		7.7.21. Identify/designate contact points.	X		X	
		7.7.22. Identify/designate start point (SP).				X
		7.7.23. Identify/designate critical points enroute.				X
		7.7.24. Identify/designate release point (RP).				X
		7.7.25. Identify/designate route(s) to start point.				X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
7. Develop scheme of maneuver for operation. (Cont'd)	7.7. Identify tactical control measures specified by higher headquarters/establish own tactical control measures. (Cont'd)	7.7.26. Identify/designate route(s) from start point to release point.				X
		7.7.27. Identify/specify start point arrival and clearance times of first march unit.				X
		7.7.28. Specify start point arrival and clearance times of other march units.				X
		7.7.29. Specify arrival and clearance times of each march unit at each critical point enroute.				X
		7.7.30. Specify arrival and clearance times of each march unit at release point.				X
		7.7.31. Specify route(s) from release point to destination(s).				X
		7.7.32. Specify average speed to be maintained.				X
		7.7.33. Specify maximum catch-up speed.				X
		7.7.34. Specify vehicle distance.				X
		7.7.35. Specify road/time gap between march units.				X
		7.7.36. Specify scheduled halts to be made.				X
		7.7.37. Specify actions to be taken at scheduled halts.				X
		7.7.38. Specify actions to be taken in event of unscheduled halt(s).				X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP
(Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
7. Develop scheme of maneuver for operation. (Cont'd)	7.8. Develop obstacle/anti-armor plan.	7.8.1. Select locations for anti-personnel obstacles.	X	X	X	
		7.8.2. Select locations for anti-vehicle obstacles.	X	X	X	
		7.8.3. Select locations for anti-armor obstacles.	X	X	X	
		7.8.4. Specify improvement to be made to natural obstacles.	X	X	X	
		7.8.5. Select locations for anti-armor weapons.	X	X	X	
	7.9. Prepare road movement table.					X
8. Supervise execution of scheme of maneuver.	8.1. Approve/modify/disapprove subordinate units' activities in executing scheme of maneuver.					
	8.2. Redirect subordinate units' activities to exploit/counter contingencies.	8.2.1. Direct continuation of the attack.	X	X	X	X
		8.2.2. Direct the exploitation of early success.	X			X
		8.2.3. Direct the repulse of a counterattack.	X	X	X	
		8.2.4. Redesignate the main attack.	X			
	8.2.5. Direct the blocking of a penetration.			X		
		8.2.6. Direct the counterattack of a penetration.		X		

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
8. Supervise execution of scheme of maneuver. (Cont'd)	8.2. Redirect subordinate units' activities to exploit/counter contingencies. (Cont'd)	8.2.7. Direct the employment, support, and extraction of a unit directed or forced to operate as a stay-behind force.			X	
		8.2.8. Direct the reaction to enemy contact at selected points enroute.				X
		8.2.9. Direct the reaction to significant enemy contact at destination.				X
	8.3. Change all or any portion of scheme of maneuver to exploit unanticipated changes in the situation.	8.3.1. Change disposition of tactical groups to exploit unanticipated changes in the situation.	X	X	X	X
		8.3.2. Change movement of tactical groups to exploit unanticipated changes in the situation.	X	X	X	X
	8.4. Change all or any portion of scheme of maneuver to counter unanticipated changes in the situation.	8.4.1. Change disposition of tactical groups to counter unanticipated changes in the situation.	X	X	X	X
		8.4.2. Change movement of tactical groups to counter unanticipated changes in the situation.	X	X	X	X
	8.5. Change task organization to exploit unanticipated changes in the situation.	8.5.1. Change composition of tactical groups to exploit unanticipated changes in the situation.	X	X	X	X
			X	X	X	X
			X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
8. Supervise execution of scheme of maneuver. (Cont'd)	8.5.	Change task organization to exploit unanticipated changes in the situation. (Cont'd)				
	8.5.2.	Change command relationships of elements of tactical groups to exploit unanticipated changes in the situation.				
	8.6.	Change task organization to counter unanticipated changes in the situation.				
	8.6.1.	Change composition of tactical groups to counter unanticipated changes in the situation.	X	X	X	X
	8.6.2.	Change command relationships of elements of tactical groups to counter unanticipated changes in the situation.	X	X	X	X
	8.7.	Supervise execution of security measures.	X	X	X	X
	8.7.1.	Enforce/change/cancel established security measures.	X	X	X	X
	8.7.2.	Establish needed additional security measures.	X	X	X	X
	8.8.	Supervise compliance with tactical control measures.	X	X	X	X
	8.8.1.	Enforce/change/cancel established tactical control measures.	X	X	X	X
9. Develop plan of fire support.	8.8.2.	Establish needed additional tactical control measures.	X	X	X	X
	9.1.	Determine organic fire support available.	X	X	X	X
	9.1.1.	Determine heavy mortar support available.	X	X	X	X
	9.1.2.	Determine Redeye support available.	X	X	X	X
	9.1.3.	Determine direct fire support available.	X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP
(Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
9. Develop plan of fire support. (Cont'd)	9.2. Determine availability of nonorganic fire support available.	9.2.1. Determine availability of field artillery support.	X	X	X	X
		9.2.2. Determine whether dedicated battery has been designated.	X			
		9.2.3. Determine availability of AFA support.	X	X	X	X
		9.2.4. Determine availability of ADA support.	X	X	X	X
		9.2.5. Determine availability of attack helicopter support.	X	X	X	X
		9.2.6. Determine availability of tactical air support.	X	X	X	X
		9.2.7. Determine availability of naval gunfire support.	X	X	X	X
		9.2.8. Determine priorities of fires.	X	X	X	X
		9.2.9. Determine availability of direct and indirect visible illumination.	X	X	X	X
		9.3.1. Identify/designate boundaries not identified/established by scheme of maneuver.	X	X	X	X
		9.3.2. Identify/establish zone(s) of fire.	X	X	X	X
		9.3.3. Identify/establish No Fire Line(s) (NFL).	X	X	X	X
		9.3.4. Identify/establish Fire Coordination Line(s) (FCL).	X	X	X	X
		9.3.5. Identify Fire Support Coordination Line(s) (FSCL).	X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
9. Develop plan of fire support. (Cont'd)	9.3. Identify fire support coordinating and limiting measures specified by higher headquarters/establish own fire support coordinating and limiting measures. (Cont'd)	9.3.6. Identify/establish free fire area(s).	X	X	X	X
		9.3.7. Identify/establish no fire area(s).	X	X	X	X
		9.3.8. Identify/establish fire coordination area(s).	X	X	X	X
	9.4. Determine employment of organic fire support.	9.4.1. Approve/modify/disapprove heavy mortar targets selected by companies.	X	X	X	
		9.4.2. Select own heavy mortar targets.	X	X	X	X
		9.4.3. Determine employment of Redeye section.	X	X	X	X
		9.4.4. Determine employment of antitank platoon.	X	X	X	X
		9.4.5. Determine employment of own direct fire weapons.	X	X	X	X
		9.4.6. Allocate heavy mortar FPF.		X	X	
		9.4.7. Review companies' plans for employment of their crew-served weapons.	X	X	X	X
	9.5. Request nonorganic fire support needed to support scheme of maneuver.	9.5.1. Request battalion-approved scheduled indirect targets selected by companies.	X			
		9.5.2. Request battalion-approved on-call indirect targets selected by companies.	X	X	X	

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
9. Develop plan of fire support. (Cont'd)	9.5. Request nonorganic fire support needed to support scheme of maneuver. (Cont'd)	9.5.3. Request battalion-approved counterbattery targets selected by companies.	X	X	X	
		9.5.4. Request own scheduled indirect targets.	X	X	X	
		9.5.5. Request own on-call indirect targets.	X	X	X	X
		9.5.6. Request own counterbattery targets.	X	X	X	X
		9.5.7. Request designation of a dedicated battery.	X			
		9.5.8. Request AFA support.	X	X	X	X
		9.5.9. Request ADA support.	X	X	X	X
		9.5.10. Request attack helicopter support.	X	X	X	X
		9.5.11. Request preplanned tactical close air support missions.	X	X	X	X
		9.5.12. Request immediate tactical close air support missions.	X	X	X	X
		9.5.13. Request allocation of field artillery FPF.		X	X	
		9.5.14. Request naval gunfire support.	X	X	X	X
		9.5.15. Request prearranged direct and indirect visible illumination.	X	X	X	X
		9.5.16. Request on-call direct and indirect visible illumination.	X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP
(Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
9. Develop plan of fire support. (Cont'd)	9.6. Assign priorities of fire.		X	X	X	X
	9.7. Prepare fire support annex reflecting prearranged organic and nonorganic fire support available for operation.					
10. Supervise delivery of prearranged fire support.	10.1. Approve/modify/cancel prearranged field artillery indirect fires.		X	X	X	X
	10.2. Approve/modify/cancel prearranged naval gunfire.		X	X	X	X
	10.3. Approve/modify/cancel prearranged counterbattery fires.		X	X	X	X
	10.4. Approve/modify/cancel prearranged AFA support.		X	X	X	X
	10.5. Approve/modify/cancel prearranged attack helicopter support.		X	X	X	X
	10.6. Approve/modify/cancel prearranged tactical close air support.		X	X	X	X
	10.7. Change/request change of priorities of fires.		X	X	X	X
	10.8. Approve/modify/cancel prearranged direct and indirect visible illumination.		X	X	X	X
	10.9. Enforce/change/cancel established fire support coordinating and limiting measures.		X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
11. Supervise/request delivery of un-planned fire support.	11.1. Approve/modify/disapprove requests for unplanned field artillery indirect fires.		X	X	X	X
	11.2. Approve/modify/disapprove requests for unplanned naval gunfire.		X	X	X	X
	11.3. Approve/modify/disapprove requests for unplanned counterbattery fires.		X	X	X	X
	11.4. Approve/modify/disapprove requests for unplanned AFA support.		X	X	X	X
	11.5. Approve/modify/disapprove requests for immediate tactical close air support.		X	X	X	X
	11.6. Approve/modify/disapprove requests for immediate attack helicopter support.		X	X	X	X
	11.7. Request unplanned fire support.		X	X	X	X
		11.7.1. Request unplanned indirect field artillery fire support.	X	X	X	X
		11.7.2. Request unplanned naval gunfire.	X	X	X	X
		11.7.3. Request unplanned counter-battery fires.	X	X	X	X
		11.7.4. Request unplanned AFA support.	X	X	X	X
		11.7.5. Request unplanned attack helicopter support.	X	X	X	X
		11.7.6. Request immediate tactical close air support.	X	X	X	X
		11.7.7. Request unplanned direct and indirect visible illumination.	X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
11. Supervise/request delivery of unplanned fire support. (Cont'd)	11.8. Approve/modify/disapprove requests for unplanned direct and indirect visible illumination.					
	11.9. Change/request change of fire support coordinating and limiting measures.					
12. Direct counter-intelligence activities.	12.1. Determine measures to be employed to deceive the enemy as to nature/place/time of operation.					
	12.1.1. Determine measures to be employed to deceive the enemy as to nature/place/time of operation.	12.1.1.1. Require preparation of dummy positions.	X	X	X	X
		12.1.1.2. Require emplacement of dummy equipment.	X	X	X	X
		12.1.1.3. Require continuation of apparently normal activities as long as possible.	X	X	X	X
		12.1.1.4. Conduct misleading movements of troops.	X	X	X	X
		12.1.1.5. Conduct misleading movements of wheeled/tracked vehicles.	X	X	X	X
		12.1.1.6. Conduct such misleading tactical operations as demonstrations, feints, and ruses.	X	X	X	X
		12.1.1.7. Require maintenance/increase/reduction of normal volume of radio traffic.	X	X	X	X
		12.1.1.8. Require transmission of dummy radio traffic.	X	X	X	X

(Continued)

FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP (Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
12. Direct counter-intelligence activities. (Cont'd)	12.2. Specify measures to be employed to deny the enemy information of the operation.	12.2.1. Require concealment of troop movements during preparation.	X	X	X	X
		12.2.2. Require concealment of movements of wheeled/tracked vehicles during preparation.	X	X	X	X
		12.2.3. Impose radio listening silence.	X	X	X	X
		12.2.4. Require transmission on low power during conduct of operation.	X	X	X	X
		12.2.5. Establish population control measures.	X	X	X	X
	12.3. Supervise execution of directed counterintelligence activities.	12.3.1. Enforce/change/cancel directed counterintelligence activities.	X	X	X	X
		12.3.2. Direct needed additional counterintelligence activities.	X	X	X	X
		13.1.1. Develop content of warning order.	X	X	X	X
	13.1. Develop/issue warning order.	13.1.2. Select time of issue of warning order.	X	X	X	X
		13.1.3. Select place of issue of warning order.	X	X	X	X
		13.1.4. Select method of issue of warning order.	X	X	X	X

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FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP
(Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
13. Issue orders. (Cont'd)	13.2. Develop/issue operation order.	13.2.1. Develop content of operation order.	X	X	X	X
		13.2.2. Select time of issue of operation order.	X	X	X	X
		13.2.3. Select place of issue of operation order.	X	X	X	X
		13.2.4. Select method of issue of operation order.	X	X	X	X
14. Supervise execution of orders.	13.3. Issue fragmentary orders.		X	X	X	X
	14.1. Approve/modify subordinate units' actions in complying with orders.		X	X	X	X
	14.2. Approve/modify supporting units' actions in complying with orders.		X	X	X	X

Model Step 5. Communicate plans, decisions, and intelligence.

15. Maintain communications capability.	15.1. Establish primary means of communication.	15.1.1. Establish required radio nets.	X	X	X	X
		15.1.2. Establish required wire nets.	X	X	X	X
		15.1.3. Establish messenger system.	X	X	X	X
	15.2. Maintain communication means.	15.2.1. Establish/employ procedures to be followed in the event of jamming of radio nets.	X	X	X	X
		15.2.2. Insure maintenance of wire nets.	X	X	X	X
		15.2.3. Establish alternate means of communication to replace primary means.	X	X	X	X

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FUNCTIONS, TASKS, AND ACTIVITIES OF BATTALION COMMAND GROUP
(Continued)

Function	Task	Activity	Attack	Defense	Delay	Road Movement
16. Maintain communications flow.	16.1. Maintain communications discipline.	16.1.1. Restrict traffic to essential transmissions.	X	X	X	X
		16.1.2. Enforce compliance with approved radio-telephone procedures.	X	X	X	X
	16.2. Report significant developments in the tactical situation to higher, adjacent, subordinate, and supporting headquarters.					
			X	X	X	X